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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,586	02/12/2004	Roger Howard Williams III	U 015456-6	4935

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EXAMINER

SUBRAMANIAN, NARAYANSWAMY

ART UNIT PAPER NUMBER

3692

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No. 10/777,586	Applicant(s) WILLIAMS, ROGER HOWARD	
Examiner Narayanswamy Subramanian	Art Unit 3692	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 25 January 2007.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 50,52,105 and 107-109 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 50,52,105 and 107-109 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
- Certified copies of the priority documents have been received.
 - Certified copies of the priority documents have been received in Application No. _____.
 - Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

1. This office action is in response to applicant's communications of January 25, 2007 and February 5, 2007. Amendments to claims 50, 52, 105 and 107-109 have been entered. Claims 50, 52, 105 and 107-109 have been examined. The rejections and response to arguments are stated below.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 50, 52, 105 and 107-109 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory Subject matter.

35 USC 101 requires that in order to be patentable the invention must be a "new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof" (emphasis added).

Claims 50, 52, 105 and 107-109 are rejected under 35 U.S.C. § 101 for failing to produce useful, concrete and tangible result. Claims 50, 105 and 108 recite the steps of providing three different clauses that doesn't ensure anything real world, so it lacks tangibility. The steps of providing a clause do not require a response. Arguably this is not useful, as merely providing a clause doesn't yield anything specific and substantial.

The Court of Appeals for the Federal Circuit issued opinions in *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 149 F. 3d 1368, 47 USPQ2d 1596 (Fed. Cir. 1998) and *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 50 USPQ2d 1447 (Fed. Cir. 1999). These decisions explained that, to be eligible for patent protection, the claimed invention as a

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whole must accomplish a practical application. That is, it must produce a “useful, concrete and tangible result.” *State Street*, 149 F.3d at 1373-74, 47 USPQ2d at 1601 02. To satisfy section 101 requirements, the claim must be for a practical application of the § 101 judicial exception, which can be identified in various ways: (a) The claimed invention “transforms” an article or physical object to a different state or thing. (b) The claimed invention otherwise produces a useful, concrete and tangible result, based on the factors discussed below.

The USPTO’s official interpretation of the utility requirement provides that the utility of an invention has to be (i) specific, (ii) substantial and (iii) credible. See MPEP § 2107.

The tangible requirement does require that the claim must recite more than a § 101 judicial exception, in that the process claim must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77 (invention ineligible because had “no substantial practical application”). The claims do not meet this requirement.

For an invention to produce a “concrete” result, the process must have a result that can be substantially repeatable or the process must substantially produce the same result again. In re Swartz, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000) (where asserted result produced by the claimed invention is “irreproducible” claim should be rejected under section 101). The opposite of “concrete” is unrepeatable or unpredictable. The limitation of “any possible combination or permutation of principal and interest to be paid, and any possible timing thereof” does not produce anything concrete. Similarly allowing a debtor and a creditor to agree upon something, providing that the instrument's extension risk and credit risk be completely subject to the creditor's and debtor's control and providing that any options in the subject market

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are allowed to be made explicit, priced, and used to correlatively adjust the principal size, interest rate, and payment timing of the underlying obligation do not produce anything concrete.

There is no useful, concrete and tangible result produced from implementing the steps of the claimed invention. Claims 52, 107 and 109 are rejected for the same reason and by way of dependency on a rejected independent claim.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. Claims 52, 107 and 109 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 52 recites the limitation of “The method of claim 50, further comprising the step of pricing and capturing the value of a financial entity’s regulatory capital savings using the following equation”. However it is not clear what the step of pricing and capturing the value of a financial entity’s regulatory capital savings using the following equation has to do with the objective of structuring an interest-bearing instrument in a subject market or the steps of the claim in claim 50. Hence it is not clear as to what is the relationship between claims 50 and 52 and it is also not clear how claim 52 further limits the claimed invention of claim 50. Similar ambiguities are present in claims 107 and 109. Appropriate clarification/correction is required.

In view of the ambiguities in claims 52, 107 and 109, the examiner is unable to provide art rejections for these claims.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 50, 105 and 108 are rejected under 35 U.S.C. 103(a) as being unpatentable over King (US Patent 5,742,775).

Claims 50, 105 and 108, King teaches a computer-based method and system for structuring an interest-bearing instrument in a subject market, the instrument having a debtor, a creditor, a sensitivity to parameter changes, an extension risk, a credit risk, and an underlying obligation having a principal size, an interest rate, and a payment timing, the method comprising the steps of: providing that the instrument's sensitivity to parameter changes allow, from any time zero, the debtor and the creditor to agree upon any possible combination or permutation of principal and interest to be paid, and any possible timing thereof (See King Col 6 line 60 – Col 7 line 46 and Column 10 lines 21-56, the long term includes the time period from any time zero); providing that the instrument's extension risk and credit risk, from any time zero, be completely subject to the creditor's and debtor's control through a calculation of an agreement upon interest rates (See King Col 7 line 54 – Col 8 line 62 and Column 10 lines 21-56, extending the term implies extension risk and long term agreement between the debtor and the creditor implies that the risks are subject to their control); and providing that any options in the subject market, from any time zero, are allowed to be made explicit, and used to correlatively adjust the principal size,

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interest rate, and payment timing of the underlying obligation (See King Col 9 line 39 – Col 10 line 56, accelerated payments imply correlative adjustments of the principal size, interest rate, and payment timing of the underlying obligation). The King reference does not explicitly teach the step wherein the options in the subject market are priced. However the feature of pricing an option is old and well known. This enables the creditors and debtors involved to know the cost of including the option in the structuring of the instrument. It would have been obvious to one of ordinary skill in the art at the time of invention to include this feature to the invention of King. The combination of disclosures suggested that creditors and debtors would have benefited from knowing the cost of including the option in the structuring of the instrument.

Response to Arguments

8. In response to applicant's argument that "claim 50 recites a "method for structuring an interest-based instrument" comprising three steps for the method to use in structuring the instrument. An "instrument" is a "legal document in which some contractual relationship is given formal expression or by which some right is granted -- for example, notes, contracts, agreements." J. Downes and J.E. Goodman, *Barton's Finance & Investment Handbook* 378 (5th ed. 1986). An instrument is thus something "real world," or the opposite of abstract, and therefore a process that structures an instrument is clearly tangible, specific, substantial, and credible, the examiner respectfully disagrees. 35 USC 101 requires that in order to be patentable the invention must be a "new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof" (emphasis added). An instrument does not fall into any of these categories. Also claim 50 fails to produce useful, concrete and tangible result. Claim 50 recites the steps of providing three different clauses that doesn't ensure anything

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real world, so it lacks tangibility. The steps of providing a clause do not require a response. Arguably this is not useful, as merely providing a clause doesn't yield anything specific and substantial. Claims 105 and 108 also suffer from the same deficiencies. The computer based-system claim (claim 105) is analyzed based upon the underlying process. In the instant case this claim recites process of the respective method claims. Since the underlying process is not statutory, a computer readable storage medium that stores instructions for performing the underlying process does become statutory. Labels are not determinative § 101 inquiries. "Benson applies equally whether an invention is claimed as an apparatus or process, because the form of the claim is often an exercise in drafting." *In re Johnson*, 589 F.2d 1070, 1077, 200 USPQ 199, 206 ([CCPA] 1978). "Though a claim expressed in 'means for (functional) terms [under 35 U.S.C. § 112, sixth paragraph] is said to be an apparatus claim, the subject matter as a whole of that claim may be indistinguishable from that of a method claim drawn to the steps performed by the 'means,'" *In re Freeman*, 573 F.2d at 1247, 197 USPQ at 472. Moreover, that the claimed computing system may be a "machine" within "the ordinary sense of the word," as appellant argues, is irrelevant. The holding in *Benson* "forecloses a purely literal reading of § 101." This analytical reasoning applies to a computer-based method also.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "For one or more parameters selected and the values input, a function (such as Equation (8) in the present application) yields one or more parameter sensitivities, or change(s) in the value of the function relative to the parameter(s). As described in the present application's specification, any variations or adjustments to parameters are taken into consideration and calculated. (See, e.g., specification

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at p. 17, lines 16-20 [Equation (8)]; p. 22, line 25; p. 24, lines 14-15; p. 25, line 29; p. 28, line 6.)

The portion of King that the Examiner cites does not teach this”, “invention permits structuring a financial instrument that provides debtors -- such as mortgagors --with incentives to refinance borrowings when interest rates rise”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant’s other arguments with regards pending claims have been considered but are not persuasive.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(a) Evans et al. (US Pub. No. 2004/0019560 A1) (January 29, 2004) System and Method for Debt Presentment and Resolution.

(b) King (US Patent 6,148,293) (November 14, 2000) Method and apparatus of Creating a Financial Instrument and Administering an Adjustable Rate Loan System.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on

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the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Narayanswamy Subramanian whose telephone number is (571) 272-6751. The examiner can normally be reached Monday-Thursday from 8:30 AM to 7:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached at (571) 272-6777. The fax number for Formal or Official faxes and Draft to the Patent Office is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PMR only. For more information about the PMR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dr. N. Subramanian
Primary Examiner
Art Unit 3692

March 29, 2007